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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,057	10/12/2004	Hubert Baumgart	PAT-00293	2264
26922	7590	12/27/2006		
BASF CORPORATION 1609 BIDDLE AVENUE WYANDOTTE, MI 48192			EXAMINER CHEUNG, WILLIAM K	
			ART UNIT	PAPER NUMBER
			1713	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/27/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/511,057

Applicant(s)

BAUMGART ET AL.

Examiner

William K. Cheung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Request for Continued Examination

1. The request filed on December 1, 2006 for a Request for Continued Examination (RCE) under 37 CFR 1.53(d) based on parent Application No. 10/511,057 is acceptable and a RCE has been established. An action on the RCE follows. Claims 1-19 are pending.

2. In view of applicants argument and amendment filed November 2, 2006, the rejection of Claim 1-19 under 35 U.S.C. 112, first paragraph, is withdrawn. Further, the rejection of Claims 1-11, 15-19 under 35 U.S.C. 112, second paragraph, is withdrawn.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 (line 3), claim 13 (line 3), claim 14 (line 1), the recitations “complementary” are considered indefinite because the recited term is not defined in the specification. What does “complementary” mean in reference to allophanate groups and carbamate groups?

Applicant's arguments filed July 18, 2006 have been fully considered but they are not persuasive. Applicants argue that one of ordinary skill in art would recognize that “at least one crosslinking agent containing on average per molecule at least two reactive functional groups which are complementary to allophanate groups” of claim 12 refers to functional groups that will react with allophanate to form crosslinking bonds between molecules. However, the examiner disagrees because applicants' specification fails to disclose such definition.

Applicants argue that one of ordinary skill in art would recognize that “at least one reactive functional group which is complementary to carbamate and allophanate groups” of claims 13 and 14 refers to functional groups that can react with carbamate and allophanate groups to join separate oligomers and/or polymers. However, the examiner disagrees because applicants' specification fails to disclose such definition.

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Applicants argue that "complementary" is adequately described or defined in the specification (0049-0051). However, the examiner disagrees. Applicants must recognize that the specification (0051) clearly requires the full recitation of "complementary reactive functional groups are" when reciting some examples of "reactive functional groups". Therefore, the examiner has a reasonable basis to maintain that the recited "complementary" of claims 12-14 does not inherently include the feature of "reactive functional groups".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

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Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-19 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Voris et al. (US 7,056,522).

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*The invention of claims 1-19 relates to a **heat-curable thixotropic mixture** containing **allophanate groups** comprising*

- (A) at least one **oligomer and/or polymer** that contains at least one **allophanate group** or contains at least one **carbamate group** and at least one **allophanate group**, and*
- (B) at least one **thixotropic agent** comprising a **urea or a urea derivative** prepared by reacting at least one **amine and/or water** with at least one **polyisocyanate**.*

Voris et al. (col. 9, line 5 to col. 11, line 52) disclose a mixture composition comprising at least one oligomer and/or polymer that contains at least one allophanate group (col. 10, line 29-47), and an urea or an urea derivative prepared by reacting at least one amine and/or water with at least one polyisocyanate (col. 10, line 48-61).

Regarding the claimed "heat-curable" feature, Voris et al. (col. 9, line 5 to col. 11, line 52) clearly teach a composition that is curable (or crosslinkable). Although Voris et al. do not explicitly indicate that the disclosed curable composition is curable by heat, applicants must recognize that it is well known that the crosslinking reaction of Voris et al. can be accelerated with "heat". Therefore, the examiner has a reasonable basis that Voris et al have met the claimed "heat curable" feature. Regarding the claimed "thixotropic agent" feature, in view of the substantially identical composition of Voris et al. and the composition as claimed, the examiner has a reasonable basis that the

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claimed "thioxotropic agent" is inherently possessed in Voris et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Regarding claimed "silica" of claim 2 and 10, Voris et al. (col. 6, line 34) clearly teach the inclusion of silica, which generically can either be hydrophobic or hydrophilic.

Regarding the claimed "wetting agent" of claim 3, applicants' claim 11 clearly disclose that polyurethanes are good wetting agent which is also taught in Voris et al. through out the entire disclosure.

Regarding the claimed "addition (co)polymer" and "a polycondensation resin" of claims 4, 5, Voris et al. (col. 6, line 23-67; col. 12, line 6-42) clearly teach such a composition comprising polyethylene, polypropylene, PET, or polyurethane (col. 6, line 40-43). Further, Voris et al. (col. 6, line 65-67) clearly teach the inclusion of nylon, ethylene-vinyl alcohol (hydrolyzed polyvinylacetate); epoxy resins, and unsaturated polyesters. Voris et al. (col. 12, line 14) clearly teach the inclusion of styrene-butadiene rubber (which can be a block copolymer), polyacrylates, polymethacrylates, and polyurethanes (col. 12, line 12-14).

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Regarding claims 6, 7, Voris et al. (col. 10, line 43-44) clearly disclose the use of amine based catalyst, which generically includes the broad number of families of amines being claimed.

Regarding claim 9, Voris et al. (col. 9, line 23-34) clearly disclose the use of HDI and other diisocyanates.

Regarding the claimed coating application methods of claims 17-19, Voris et al. (abstract) clearly teach the claimed coating applications. Regarding the claimed "clearcoat" feature of claim 18, in view of the substantially identical composition of Voris et al. and the composition as claimed, the examiner has a reasonable basis that Voris et al. inherently possess the claimed "clearcoat" feature. Voris et al. (col. 1, line 18-49) clearly disclose the various type of substrates and applications that the disclosed coating composition can be used.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung, Ph. D.

Primary Examiner

December 21, 2006

**WILLIAM K. CHEUNG
PRIMARY EXAMINER**